

ABSTRACT OF THE DISCLOSURE

The invention relates to a receiver optical sub-assembly (ROSA) for use in a high-speed small-form factor transceiver. The ROSA, according to the present invention, includes a stacked chip design in which a semiconductor micro-bench, upon which the photodiode and trans-impedance amplifier are mounted, is disposed perpendicular to the direction that the light travels. A flexible electrical connector is attached to the semiconductor micro-bench for electrically connecting the ROSA to a host transceiver device. The flexible electrical connector is fixed to the surface of the semiconductor micro-bench with portions cut-out to receive the amplifier and other electrical components extending therefrom. To facilitate assembly, wells are etched from the semiconductor micro-bench corresponding to bumps extending from a mounting flange for the optical coupler.